IO: EMO JUNITOR

## CLAIMS

A test device for testing of analyte concentration in a fluid to be applied thereto, the device comprising:

a plurality of sensors on a reel, each of said sensors carrying reagent means for producing an electrical signal in response to the concentration of analyte in an applied fluid, and each of said sensors having a plurality of electrodes, corresponding electrodes of adjacent sensors being connected together by a conductive track on the reel; and

a meter comprising electronics means for producing a signal output which is dependent on the electrical signal from the said sensors, the meter having contacts which are electrically connected with the said conductive tracks; wherein the contacts remain in a fixed location relative to the meter when the reel is advanced.

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- A test device as claimed in claim 1, wherein the meter has contacts which are permanently connected to the said conductive tracks.
- A test device as claimed in claim 1 or claim 2, 25 further including separating means for separating a used sensor from one end of the reel.
- A test device as claimed in claim 3, wherein the separating means comprises cutting means for cutting the reel.
  - A test device as claimed in claim 3 or claim 4, wherein a sensor is exposed to permit application of a fluid sample at a test area which is within a housing, the housing having a lid which can be moved to cover the test area.

- 6. A test device as claimed in claim 5, wherein moving the lid from an open position to a closed position causes the reel to advance to locate a fresh sensor in the test area.
- 7. A test device as claimed in claim 5 or claim 6, wherein closure of the lid causes the separating means to operate to separate a used sensor from one end of the reel.

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- 8. A test device as claimed in claim 6, wherein movement of the lid causes the reel to advance by means of a ratchet mechanism.
- 9. A test device as claimed in claim 5, wherein the lid is pivotally mounted in relation to the housing, pivoting of the lid in one direction causing the reel to advance so that a fresh sensor is presented in the test area, and pivoting of the lid in another direction causing separation of that sensor from the end of the reel.
  - 10. A test device as claimed in any one of the preceding claims, wherein the reel is wound around a rotatable drum.
- 11. A test device as claimed in any one of claims 5 to 10, wherein a container is provided in the housing to receive sensors which have been separated from the 30 reel.
  - 12. A test device as claimed in claim 11, wherein the container is removable from the housing.
- 35 13. A test device as claimed in any one of the preceding claims, wherein the meter is housed in a

housing and the reel is provided in a removable cartridge which is mounted in relation to the housing.

- 14. A cartridge for releasably mounting in relation to the housing of a test device in accordance with claim 13, comprising a plurality of sensors on a reel, each of said sensors carrying reagent means for producing an electrical signal in response to the concentration of analyte in an applied fluid, and each of said sensors having a plurality of electrodes, corresponding electrodes of adjacent sensors being connected together by a conductive track on the reel.
- 15. A cartridge as claimed in claim 14, further including a mechanism for unwinding and advancing the reel when the cartridge is mounted in the housing of a test device.
- 16. A cartridge as claimed in claim 14 or claim 15, 20 further including storage means for storing used sensors.
- 17. A cartridge for releasably mounting in relation to the housing of a test device in accordance with claim
  25 13, substantially as herein described with reference to or as shown in the drawing.
  - 18. A test device substantially as herein described with reference to or as shown in the drawing.